



**EverFocus**<sup>®</sup>

1/3" CCD Indoor 3-Axis Dual Voltage  
True Day/Night IR Dome Camera  
Operation Instructions

Model No. **ED335**

Please read this manual first for correct installation and operation. This manual should be retained for future reference. The information in this manual was current when published. The manufacturer reserves the right to revise and improve its products. All specifications are therefore subject to change without notice.

## **PRECAUTIONS**

- 1. Do not install the camera near electric or magnetic fields.**  
Install the camera away from TV/radio transmitters, magnets, electric motors, transformers and audio speakers since the electromagnetic fields generated from these devices may distort the video image.
- 2. Never disassemble the camera beyond the recommendations in this manual nor introduce materials other than those recommended herein.**  
Improper disassembly or introduction of corrosive materials may result in equipment failure or other damage.
- 3. Try and avoid facing the camera toward the sun.**  
In some circumstances, direct sunlight may cause permanent damage to the sensor and/or internal circuits.
- 4. Keep the power cord away from water and other liquids and never touch the power cord with wet hands.**  
Touching a wet power cord with the hands or touching the power cord with wet hands may result in electric shock.
- 5. Never install the camera in areas exposed to water, oil or gas.**  
Water, oil or gas may result in equipment failure, electric shock or, in extreme cases, fire.
- 6. Cleaning**  
Use a damp soft cloth to remove any dirt from the camera body. Use lens tissue or a cotton tipped applicator and ethanol to clean the camera lens. Please do not use complex solvents, corrosive or abrasive agents for cleaning.
- 7. Do not operate the camera beyond the specified temperature, humidity or power source ratings.**  
Use the camera at temperatures within 0°C ~ 40°C (32°F~104°F) and humidity between 20~80%.  
The input power source is 12VDC/24VAC.

## **PRODUCT OVERVIEW**

ED335 is a new design IR Dome camera from Everfocus. It incorporates breakthrough DSP technology to provide brilliant color images in well lit environments. Using a SONY Super HAD CCD image sensor, the ED335 also delivers excellent true day/night low light performance, and equipped with 34 long lifespan/high illumination IR LEDs the ED335 is able to deliver bright, detailed monochrome images even in low light or no light situations out to a range of over 66 feet.

In addition, because the ED335 is easily surface or flush mounted, it can be installed in almost any indoor environment. The 3-axis gimbal enables installers to easily mount the camera on a wall or ceiling and then using the built in tilt and dual axis 180° twist, adjust the viewing angle and varifocal lens to frame the desired field of view. With this unique 3-axis positioning system, installers can capture images from virtually any angle, without compromising performance.

## **FEATURES**

- Designed with advanced digital signal processing circuitry for high image quality
- 520 TV lines of superior high resolution technology
- True Day/night with ICR module
- Equipped with 34 IR LEDs for day and night environments
- IR distance up to 66 feet (20M; depending on surface reflectivity)
- May be attached to wall or ceiling; flush or surface mounted
- 3-Axis adjustment for almost any viewing angle
- Built-in vari-focal type, auto Iris lens
- 12VDC/24VAC Dual Voltage support
- High Output IR LEDs, with a lifespan exceeding 20,000 hours

## **PACKAGE CONTENTS**

ED335 camera, including dome/cover, camera unit and outer (surface mount) base as an assembly.

This user guide.

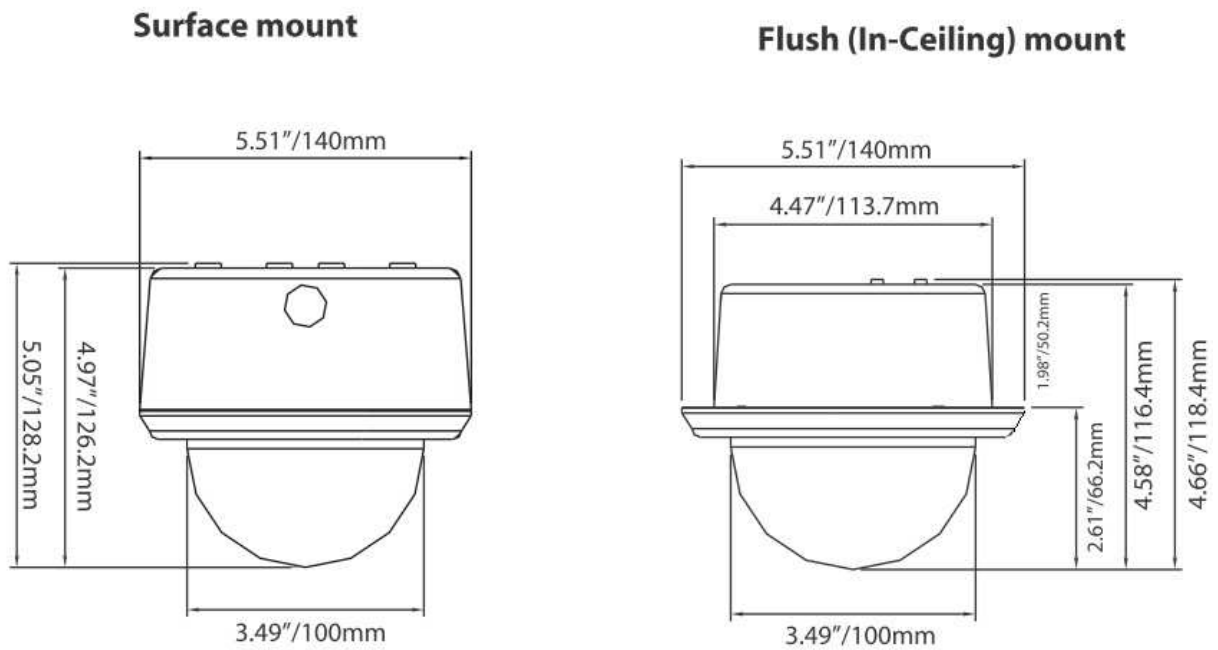
Accessory pack #1 containing:

- 4 long mounting screws
- 4 washers
- 4 plastic anchors
- Hex key for cover screws
- 4 short screws to attach flush-mounting clips
- Rubber plug for side hole in outer base.
- Mounting template

- Power supply pigtail
- Video test cable

Accessory pack #2 containing two flush mounting clips

## DIMENSIONS

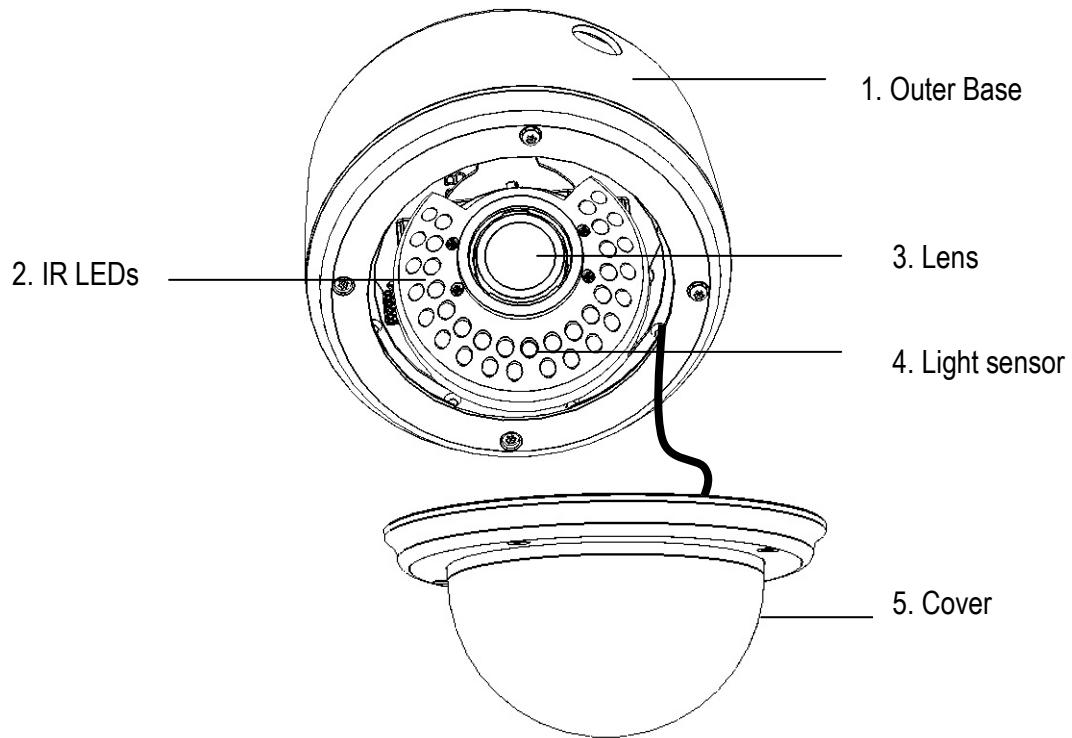


## SPECIFICATIONS

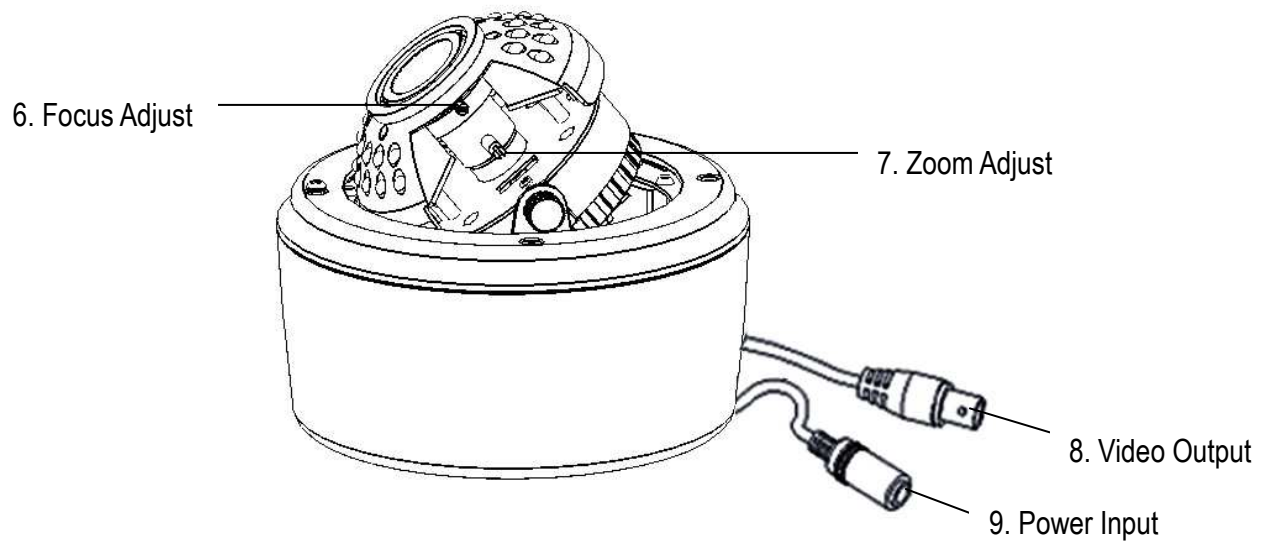
<b>Pickup Device</b>	1/3" SONY Super HAD CCD
<b>Video Format</b>	NTSC or PAL
<b>Scanning System</b>	NTSC: 525 TV lines, 60 fields/sec; PAL: 625 TV lines, 50 fields/sec.
<b>Picture Element</b>	768 x 494 (NTSC); 752 x 582 (PAL)
<b>Horizontal Resolution</b>	520 TV Lines
<b>Sensitivity</b>	0 Lux (IR LED on) 0.4 Lux/F=1.2 (AGC ON)
<b>Day/Night Type</b>	True Day/night with ICR module
<b>S/N Ratio</b>	Over 48 dB (AGC off)
<b>Electronic Shutter</b>	1/50 (1/60) ~ 1/100,000
<b>Lens Type</b>	Vari-focal lens, DC Auto Iris f=2.8~10mm/f=9~22mm
<b>Iris Level</b>	Adjustable
<b>Auto Gain Control</b>	ON
<b>Back Light Comp.</b>	ON
<b>Auto White Balance</b>	ON
<b>Gamma Correction</b>	0.45
<b>Video Output</b>	1. BNC 1.0Vp-p, 75 ohm 2. Additional testing video output 1.0Vp-p, 75ohm
<b>Sync. Mode</b>	Internal Sync.
<b>Power Source</b>	12VDC/24VAC
<b>Power Consumption</b>	12VDC: 6W max.; 24VAC: 6.5W max.
<b>Dimensions</b>	141 mm (O.D.) x 128? mm (H)/ 5.6" (O.D.) x 5.1 "(H)
<b>Weight</b>	0.66 kg, 1.45 lbs
<b>Operating Temperature</b>	0°C~40°C ; 32°F~104°F (20%~80% Humidity)
<b>IR Distance</b>	20M/66 feet
<b>IR Wavelength</b>	850nm
<b>IR LED Lifespan</b>	20,000 hours
<b>Certifications</b>	CE/FCC

## MAJOR PARTS: NAMES AND FUNCTIONS

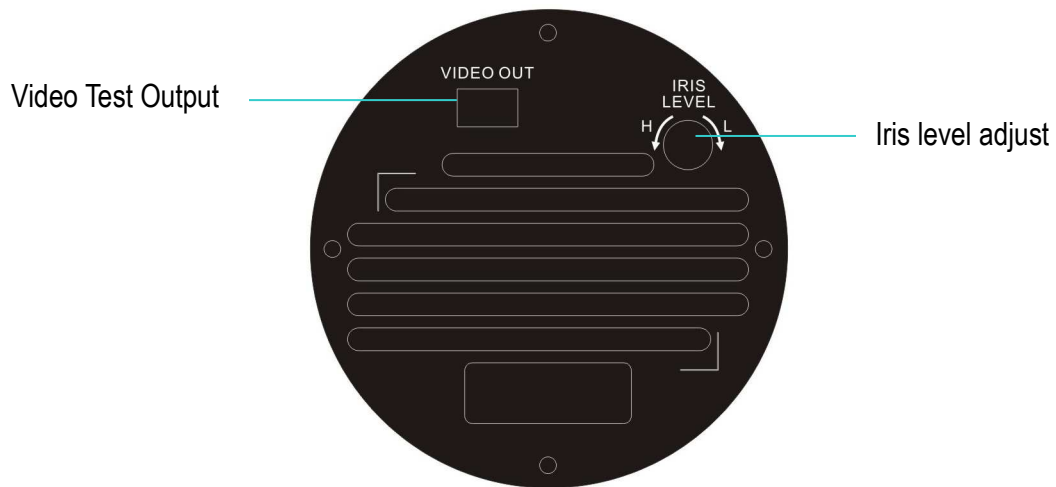
### Front View



### Side View



## Back View



### 1. Base

The camera unit sets in the dome base, when it is shipped from the factory. This base is used for surface mounting, and is discarded for flush mounting.

### 2. IR LEDs

### 3. Lens

The included vari-focal, DC iris lens allows manual adjustment of the field of view (zoom & focus). The choices for focal length range are:

- 1) 2.8-10mm
- 2) 9-22mm

### 4. Light Sensor

Light sensor is used to detect the lighting level the environment. (The light sensor is “down” when the internal camera module is properly positioned).

### 5. Camera Cover

This cover will protect the camera from dust and damage.

### 6. Focus Ring

To set the focus, and loosen the focus ring knob, and turn the ring toward <F> or <N> as necessary, and re-tighten when the adjustment is complete.

#### 7. Zoom Ring

To adjust the viewing angle, loosen the zoom ring knob. Turn the ring toward <W> to Zoom out or <T> to Zoom in as necessary, and re-tighten when the adjustment is complete.

#### 8. Video Output

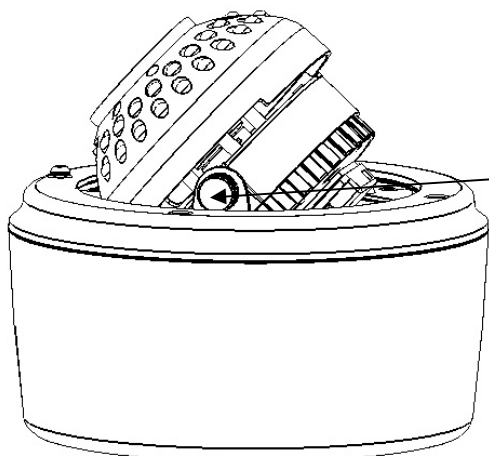
Please connect to the BNC connector of the cable from the DVR or monitor.

#### 9. Power Input

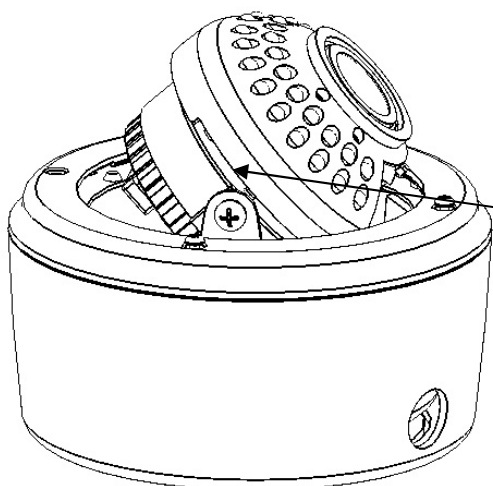
Please connect this connector to a 12VDC or 24VAC power source.

### 3-AXIS GIMBAL BRACKET

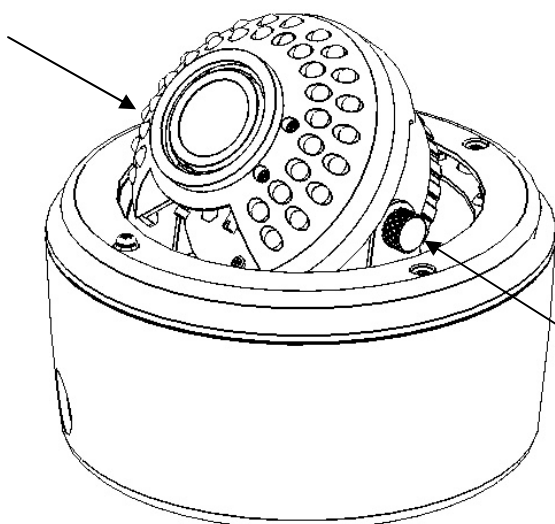
The 3-axis gimbal enables installers to easily mount the camera on a wall or ceiling and then using the built in tilt and dual axis 180° twist, to adjust the viewing angle to the desired direction. With this unique 3-axis positioning system, installers can capture images from virtually any angle, without compromising performance.



Loosen this screw manually to rotate the camera 180°



Use a screw driver to loosen this screw. Tilt the camera 180°



Hold the bracket at both sides of the camera. Rotate the entire camera 180°

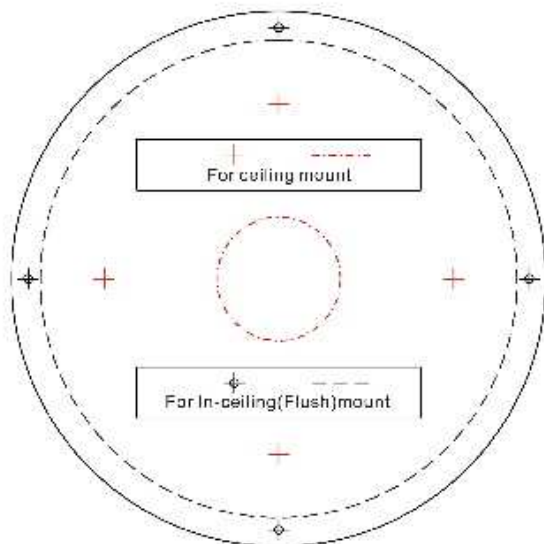


## INSTALLATION

An ED335 camera may be mounted in two ways: surface mount and flush mount. Select the one that meets your needs.

### Installation - Surface Mount

1. Paste the drilling template on the ceiling or wall. Please refer to the drilling template below.

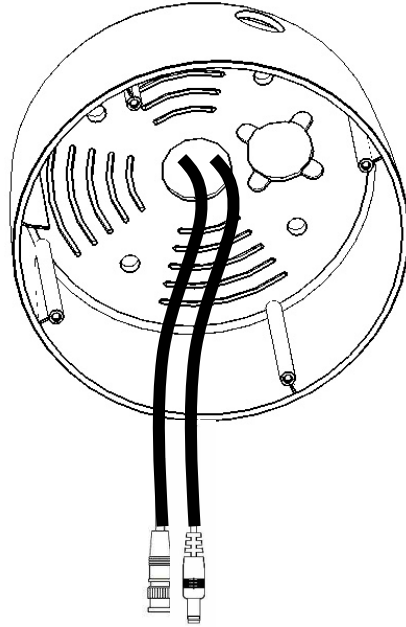


2. Use the appropriate tool to drill the INNER holes, and a clearance hole for the power and video wires.  
**Note:** *The minimum recommended material thickness is 1 cm.*
3. Use the plastic anchors and push them into the 4 small holes, to fix the outer ring into ceiling or wall.

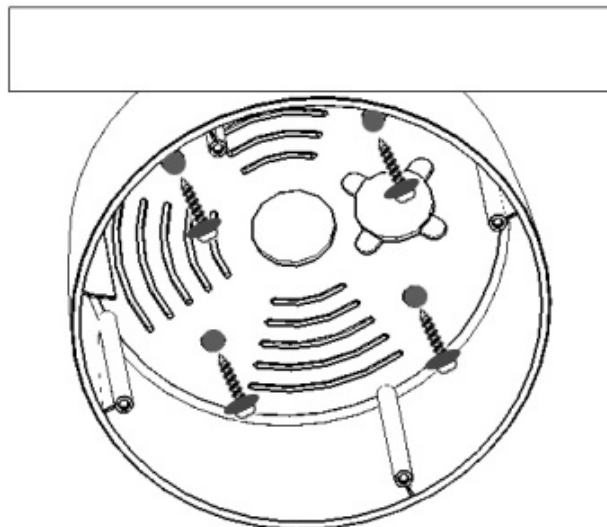


4. Remove dome cover (4 captive hex head screws); remove inner base from outer base (4 Phillips head screws – retain these for later re-assembly).

5. Pull the cables to be connected to power and video cables into the outer base from the ceiling or wall. Attach power supply pigtail adapter to power wire if needed.

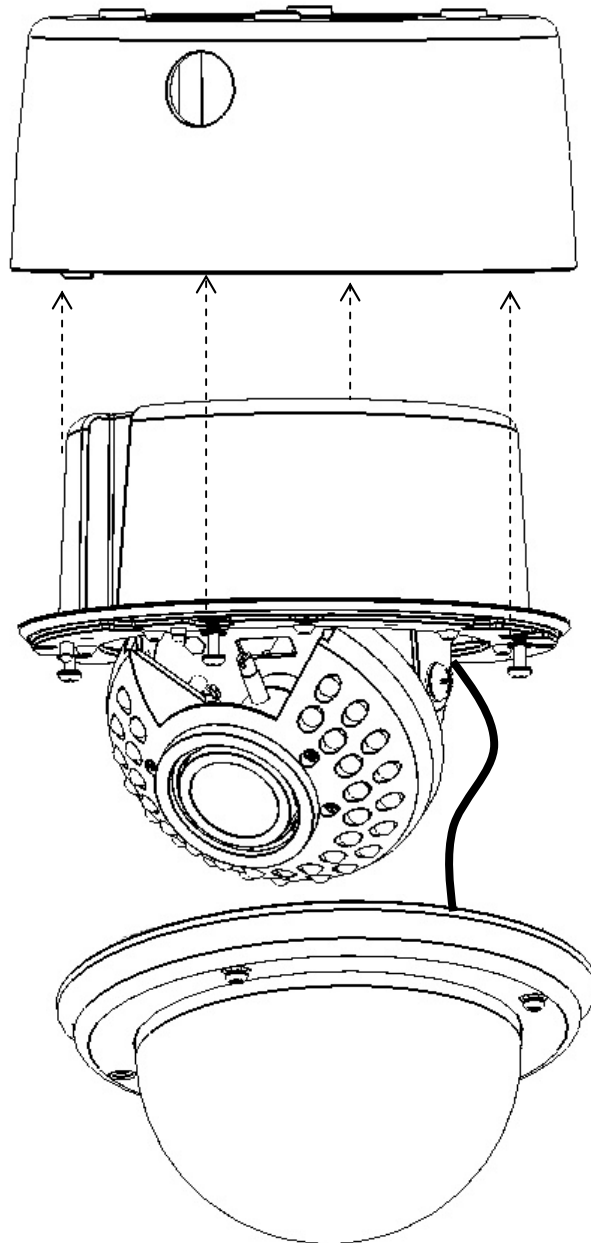


6. Take a long Phillips pan head screw with a washer and tighten it into a plastic anchor. Repeat the same step until all the 4 screws are fixed to the wall.



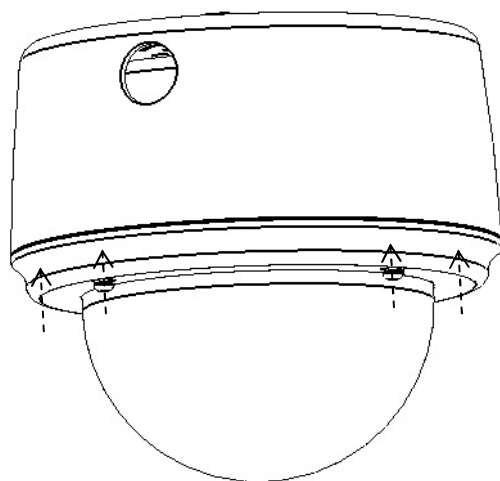
7. Attach power and video cables from source to cables from camera and push excess wire back into hole.

8. Insert inner base into outer base and secure using the 4 Phillips removed in the earlier step. Preposition camera so it is facing approximately in the desired direction.



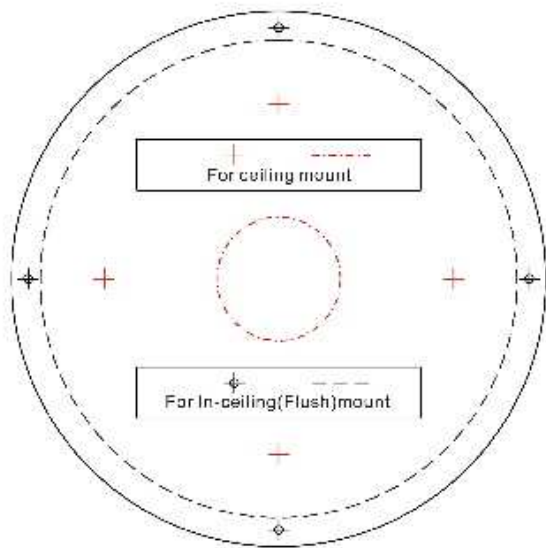
9. Attach video test cable to test point on rear of camera module. Aim and focus the camera. Remove test cable.

10. Once the camera view is as desired, attach the cover to outer base with the captive hex head screws.



## Installation - Flush Mount

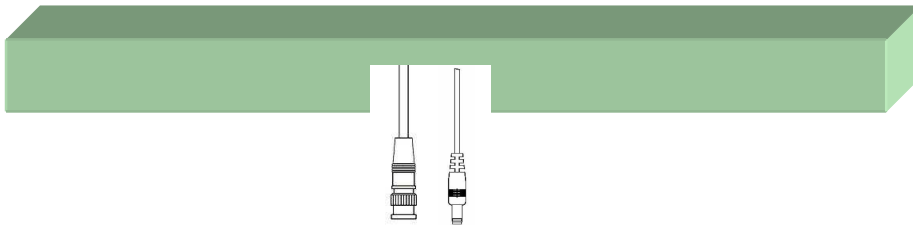
1. Paste the drilling template on the ceiling or wall. Please refer to the drilling template below.



2. Use the appropriate tool to drill the OUTER holes; carefully cut along the dashed circle to create a clearance hole for the inner base unit.

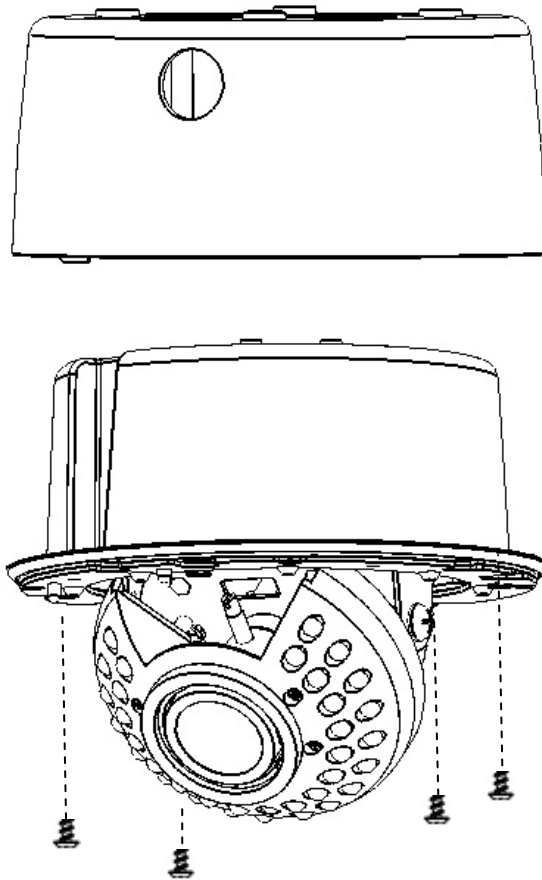
**Note:** *The minimum recommended material thickness is 1 cm.*

3. Pull the cables to be connected to power and video cables from ceiling. Attach the power pigtail adapter if necessary.

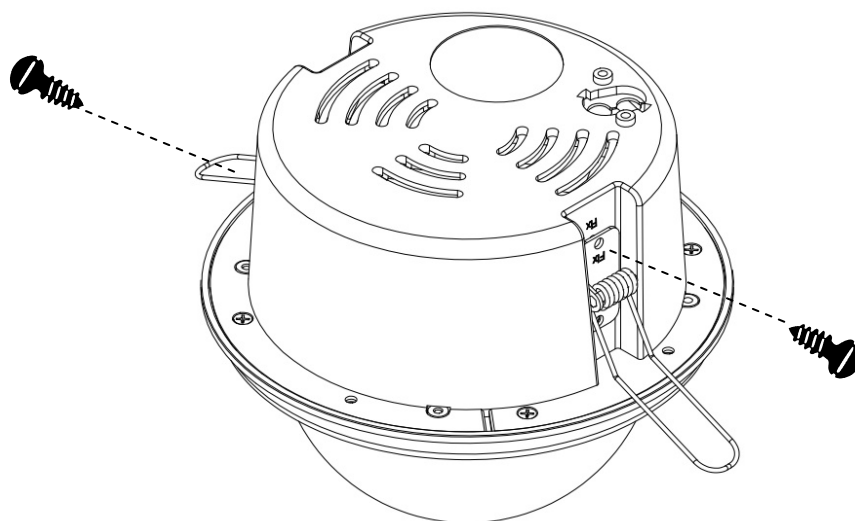


4. Remove dome cover (hex, captive screws)

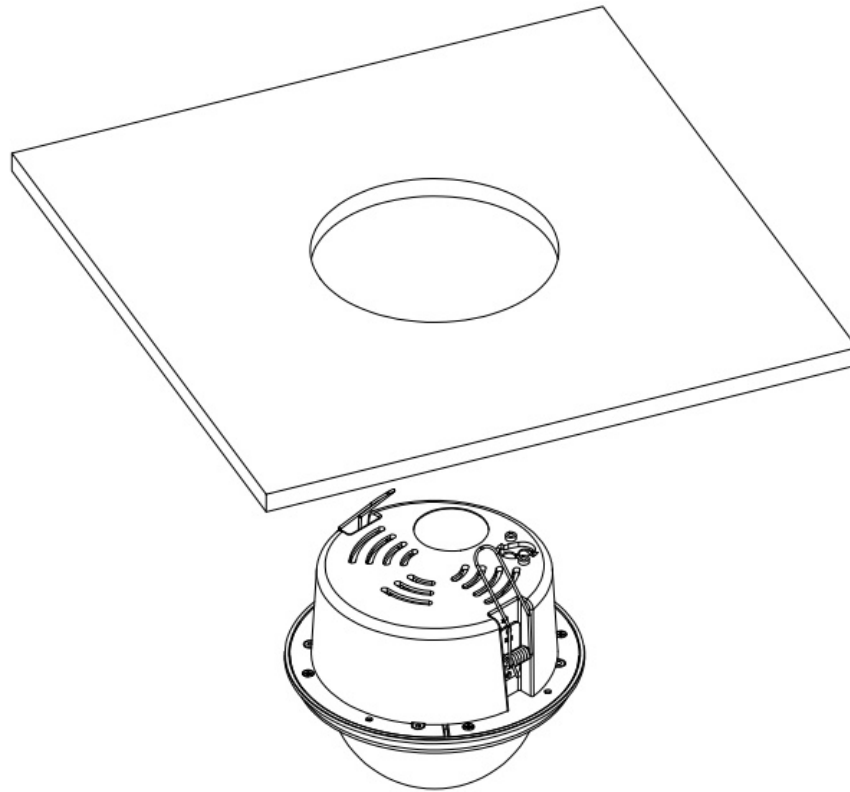
5. Unscrew the 4 Philips screws (retain for future use) to detach the inner base from the outer base. Set aside the outer base.



6. Screw the 2 spring tabs *in the orientation shown* to the slots at both sides of the inner base using the 4 Philips head screws provided. Attach the screws to the places marked "Fix".

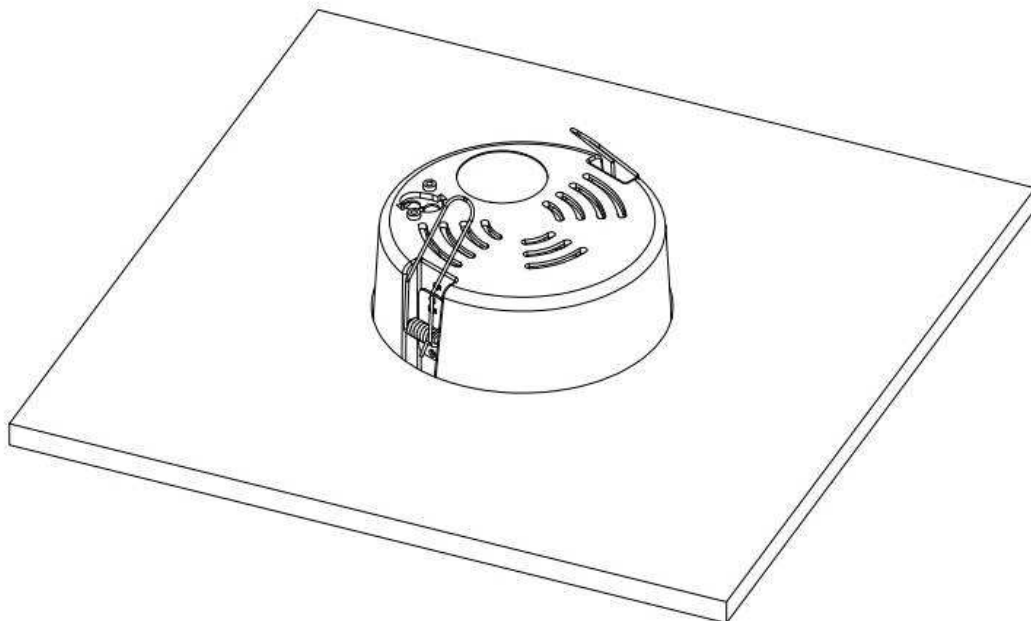


7. Attach power and video cables from source to cables from camera and push excess wire back into hole. Fold the spring tabs up.

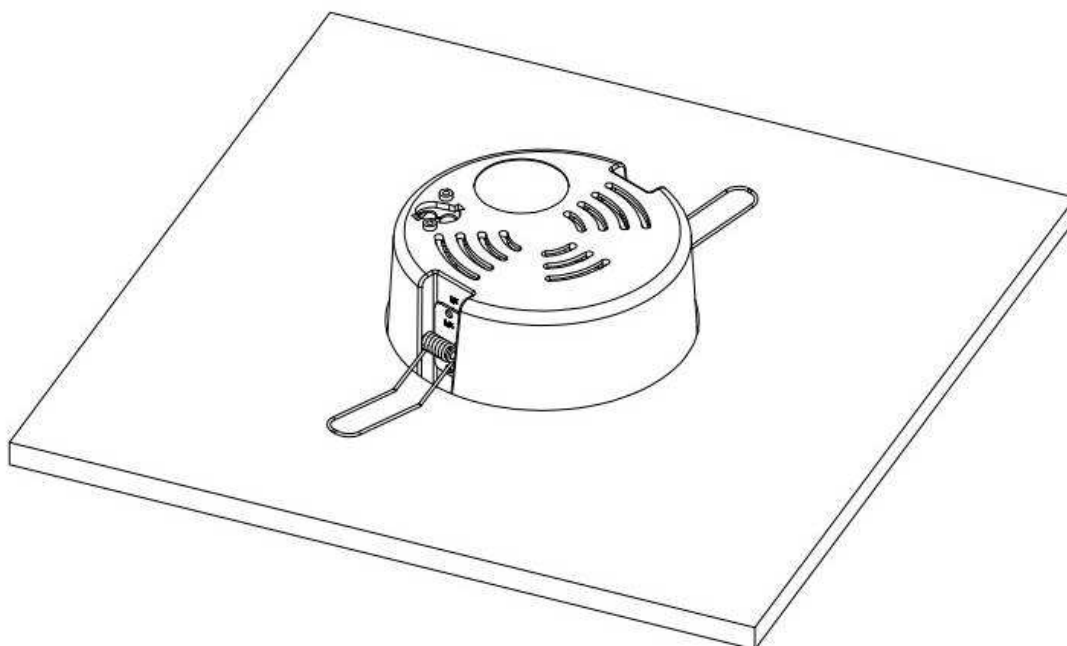


8. Preposition camera so it is facing approximately in the desired direction.

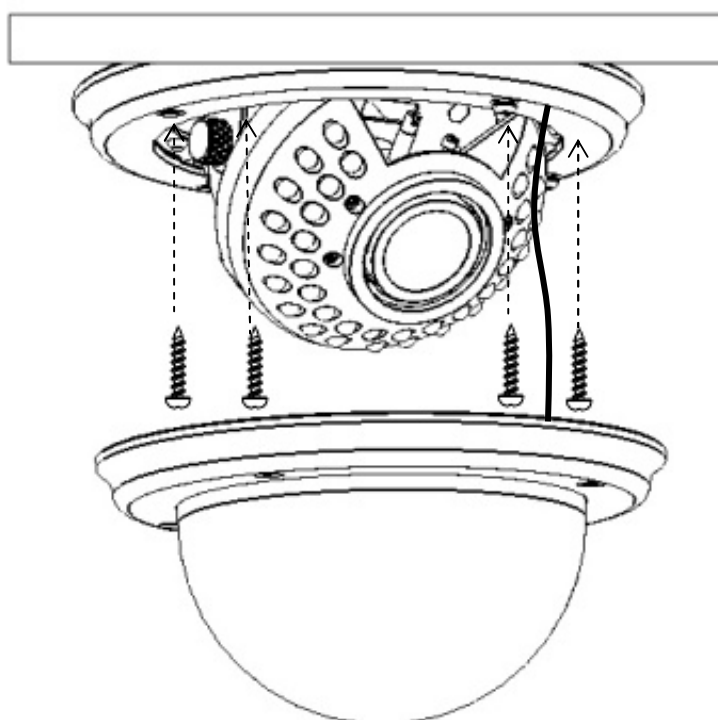
9. Push the entire inner base into ceiling while holding the spring tabs with both hands.



10. The spring tabs will open automatically to support the camera against the ceiling.



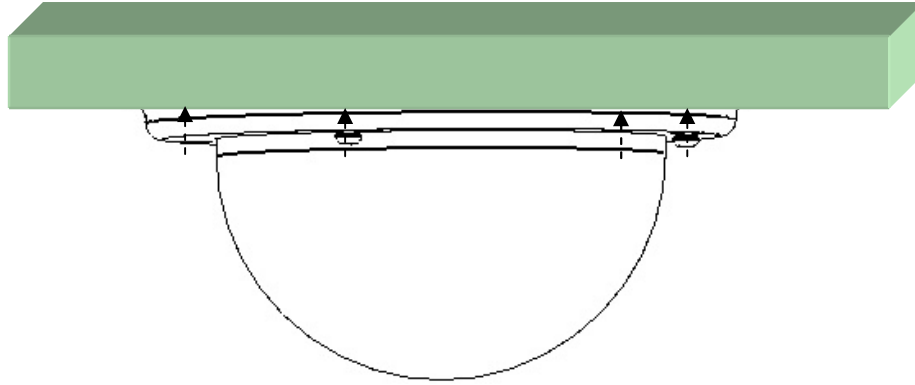
11. Use the long Phillips pan head screws (x4) provided to screw the base to the ceiling. Do NOT use washers.





12. Attach video test cable to test point on rear of camera module. Aim and focus the camera. Remove test cable.

13. Screw the cover back to the base with captive hex head screws.



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